<u>**Remarks**</u>

Claims 1, 5, 16, 20, 31 and 34 have been amended. Claims 32 and 33 have been cancelled without prejudice.

The Examiner has rejected applicants' claims 1, 3, 5, 8-12, 16, 18, 20, 23-27 and 31-34 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In order to overcome this rejection, applicants have amended independent claims 1, 16, 31 and 34, as discussed below.

The Examiner has asserted that the limitation "a first calculating step of calculating, for each of the plurality of segmented regions, a ratio of a size of the designated arbitrary region included in the segmented region to a size of said arbitrary region" is not disclosed in the original specification. The Examiner asserts that "the ratio concepts supported in the specification page 20-21 is totally different of what is claimed."

In order to overcome this rejection, applicants have amended independent claims 1, 16, 31 and 34. In particular, claim 1 has been amended so that the first calculating step recites "a first calculating step of calculating, for each <u>segmented region</u> of the plurality of segmented regions, a ratio of <u>a region belonging to</u> the designated arbitrary region <u>to</u> the segmented region." Independent claims 16, 31 and 34 have been similarly amended. Moreover, the "setting step" of claim 1 has been amended to recite "a setting step of setting a weight value, for each <u>segmented region</u> of the plurality of segmented regions<u>, corresponding to the</u> ratio <u>of each segmented region of the plurality of segmented regions</u> calculated in the first calculating step." Claims 16, 31 and 34 have been similarly amended. As discussed below the first calculating step as well as the setting step, as now recited in independent claims 1, 16, 31 and 34, are disclosed in the original specification.

First, the specification sets forth that the region designated by the user, to be an "important region," may be different in shape and size from a segmented region and, further, that a particular segmented region may only be partially included in the user designated region (see page 20, lines 7-15). For example, the user designated region can overlap multiple segmented regions, with exemplary segmented regions being shown in Figure 4. As a particular example, the user designated region (the "arbitrary region" recited in the claims) can overlap segmented region (0, 0), segmented region (1,0), segmented region (0,1) and segmented region (1,1). The arbitrary region is designated by the user, as recited in the designation step recited in claim 1. It is noted that there is no recitation that the "arbitrary region" be designated by the user with respect to any particular image.

The specification sets forth, on page 20, line 15 to page 21, line 5, that a weight A is ascertained using "the ratio of the region belonging to the rectangular region to each segmented region" (page 20, lines 18-19) and also using the formula $A = 75 \times P/100 + 25$ (page 21, lines 5-7). Figure 11 shows a flow chart of these calculations. In step S721, the ratio of the region designated by the user to the segmented region is calculated as "P %" (page 21, lines 2-5). As set forth in specification on page 20, lines 15-19, this value is derived for each segmented region. Thus, in the above example, a ratio (or percent) of the amount of the user designated arbitrary region that falls within segmented region (0,0) with respect to the entire area of that segmented region (0,0) is calculated, the ratio of the amount of area of the user designated arbitrary region that falls within segmented region (1,0) with respect to the entire area of that segmented region (1,0) is calculated, and so on (see Figure 4 for segmented regions). Thus, as an example, 35 percent of segmented region (0,0) is covered by the arbitrary region, 70% of segmented region (1,0) is covered by the arbitrary region, etc. Such

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a process of calculating these ratios (or percentages) is recited as the first calculating step of claim 1, and similarly recited in independent claims 16, 31 and 34. In addition, applicants have been careful to use within the independent claims the same language that is set forth in the specification.

Applicants claimed "setting step of setting a weight value" recited in claim 1 and similarly recited in independent claims 16, 31 and 34 likewise is supported by the original disclosure. As mentioned above, weight A, such as shown in step S722 in Figure 11, is the weight for a particular segmented region, and is calculated for each of the segmented regions. Each weight is derived from the particular segmented region's ratio as calculated by the first calculating step. Thus, setting the weight value as recited in independent claims 1, 16, 31 and 34 is supported by the original specifications.

It is, therefore, submitted that applicants' amended independent claims 1, 16, 31 and 34, as well as their respective dependent claims, are supported by an enabling disclosure and thus satisfy the provisions of 35 USC § 112, first paragraph. It is therefore requested that the rejection of the claims under 35 U.S.C. § 112 first paragraph, be withdrawn.

The Examiner has objected to claims 1, 16, 31 and 34 because these claims are allegedly "very difficult to understand due to the use of confusing language." Contrary to the Examiner's assertion, it is respectfully submitted that the independent claims are sufficiently clear, and when read with the description set forth in the specification should be understood to one of ordinary skill in the art. In particular, the phrase "a ratio of a region belonging to the designated arbitrary region to the segmented region" recited in the independent claims 1, 16, 31 and 34 clearly means the percentage (as set forth in the specification) as previously discussed. The other elements are likewise clear when read in conjunction with the

description in the specification. Accordingly, it is requested that the objection to claims 1, 16, 31 and 34 be withdrawn.

The Examiner has also rejected applicants' claims 1, 3, 5, 8-12, 16, 18, 20, 23-27 and 31-34 under 35 U.S.C. §103(a) as being unpatentable over the Lipson, et al. (US 6,463,426) patent in view of the Sato, et al. (US 6,246.804) patent. With respect to applicants' claims, as amended, this rejection is respectfully traversed.

Applicants' independent claims 1, 16, 31 and 34 had been amended to better define applicants' invention. More particularly, claim 1 has been amended to recite a designation step of designating an arbitrary region in a search source image, a segmenting step of segmenting the search source image into a plurality of segmented regions, a first calculating step of calculating, <u>for each segmented region of the plurality of segmented regions, a ratio of a region belonging to the designated arbitrary region to the segmented region, a setting step of setting a weight value, for each segmented region of the plurality of segmented regions, corresponding to the ratio of each segmented region of the plurality of segmented regions calculated in the first calculating step</u>, second calculation step of calculating image similarities between the search source image and each of the plurality of images stored in the storage means comparing the plurality of segmented regions of the search source image and segmented regions of each of the plurality of images stored in the storage means using the weight values set in the setting step, and an acquisition step of acquiring an image as a search result from the plurality of images on the basis of the image similarities calculated in the second calculation step. Applicants' independent claim 16, 31 and 34 had been similarly amended.

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It is submitted that the constructions recited in applicants' claims 1, 16, 31 and 34 are neither taught nor suggested by the cited art of record. In the Examiner's response to the applicants' previously submitted amendments and arguments, the Examiner asserted that the Sato, et al. patent teaches " a method of . . . setting step of setting a weight value . . . of each of a plurality of segmented regions (since this is a processing of dividing the designated image into regions and thus the processing of each single region would clearly indicate the processing of each of the plurality of segmented regions of the designated image) (FIG. 2 and Abstract) based on each ratio of a size of a designated arbitrary region included in the segmented region to a size of the arbitrary region (Sp/Sc and the processing area of the image over the entire image)(FIG. 52, S236; column 28, lines 15-22, 36-45, 64-68).

However, Sc in the Sato, et al. patent refers to the <u>area of designated image</u> 200, such as shown in Figure 15C (see page 28, lines 37-39). Thus, the ratio Sp/Sc pertains to a ratio of Sp compared to the <u>area of the designated image</u> and thus is quite distinct from applicants' claimed ratio. More particularly, as previously discussed, applicants' claimed ratio is for a <u>segmented region</u> and compares a region that <u>belongs to a designated arbitrary region with</u> the <u>segmented region</u>. In other words, the invention as recited in applicants' independent claims 1, 16, 31 and 34 compares the amount of the overlap between the user designated arbitrary region and a particular segmented region to the <u>entire segmented region</u>, where such segmented region is only one of a plural number of segmented regions that comprise the search source image. Quite differently, though, Sato, et al. compares the total of the areas Si, shown in Figure 53 to the <u>size of the area of the designated image</u> 200 (Sc). Thus, the ratios are quite distinct from one another.

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In view of the foregoing, the combination of Lipsin, et al. and Sato, et al. neither teaches nor suggests various features of applicants' claimed invention. Applicants' amended independent claims 1, 16, 31, and 34, and their respective dependent claims, each of which recites such features thus patentably distinguish over the combination of the Lipson, et al. and the Sato, et al. patents. It is therefore requested that the rejection of the claims under 35 U.S.C. §103(a) be withdrawn.

In view of the above, it is submitted that applicants' claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

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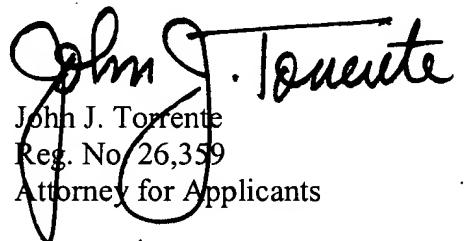
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